Bees and Wasps of note at Shakenhurst.

Kevin McGee.
Gardeners Cottage, Shakenhurst, Nr Kidderminster, Worcestershire. DY14 9AR. kevinmcgeeandrena@live.co.uk

The Shakenhurst Estate, which includes Wissett's Wood, is in a sparsely populated area of north-west Worcestershire immediately adjacent to the county boundary with Shropshire, VC40. The history of Shakenhurst can be traced back to the Norman conquest and it now occupies 1300 acres with approximately 300 acres forming Wissett's Wood. Wissett's Wood is maintained primarily for gamebird shooting by the Shakenhurst Shooting Syndicate, but there is limited access *via* public footpaths and there are tracks throughout the wood for off-road vehicles. Much of the remainder of the estate is used extensively for intensive agricultural production of oil-seed rape, barley, and wheat, and there is also a small dairy herd. The land immediately to the east of Shakenhurst Hall contains several veteran broad-leaved trees within a landscaped wood-pasture setting used primarily for silage production and occasional autumnal lamb fattening; the principal tree species are pedunculate oak *Quercus robur*, sweet chestnut *Castanea sativa* and ash *Fraxinus excelsior*.

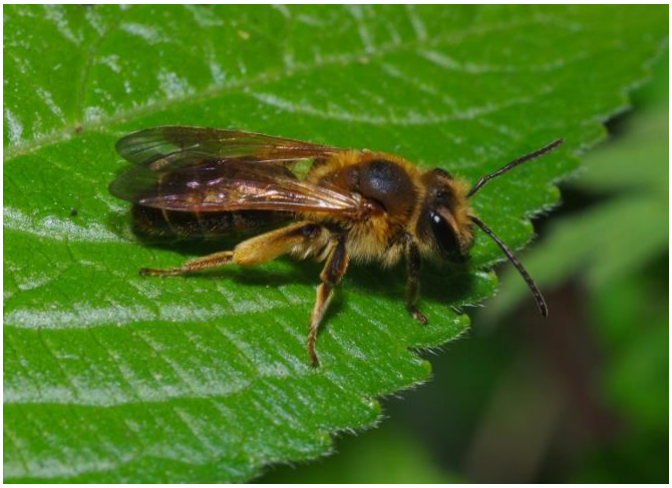
Wissett's Wood occupies a part of the estate dissected by two fast-flowing brooks, Shakenhurst Brook and Mill Brook, which flow roughly east to west before entering the River Rea. The brooks descend through steep-side valleys formed of mudstones and sandstones from the Upper Carboniferous era (Westwood *et al*, 2015) covered by a complex mosaic of woodland communities. Parts of Wissett's Wood contain plantations of Douglas fir *Pseudotsuga menziesii* and larch *Larix decidua*, some areas on the higher ground above the valleys are dominated by previously managed evenly-aged oak woodland with occasional wild cherry *Prunus avium*, but the steepest valley sides immediately adjacent to the brooks contain ancient woodland remnants.

The vegetation within the valleys of Wissett's Wood is typical of long-established relatively undisturbed blocks of ancient and semi-natural woodland in this geographic locality. The dominant tree species occupying the steep-sided valleys are ash and (probably hybridised) oak, and there are also occasional wych elm *Ulmus glabra* (including several at least fifty years old), small-leaved lime *Tilia cordata*, silver birch *Betula pendula*, goat willow *Salix caprea*, alder *Alnus glutinosa*, beech *Fagus sylvatica*, horse chestnut *Aesculus hippocastanum*, yew *Taxus baccata* and sycamore *Acer pseudoplatanus*. There are few fully mature trees but there are scattered older specimens of yew, oak and beech. The shrub layer is dominated by hazel *Corylus avellana* (including old coppiced specimens) with occasional hawthorn *Crataegus monogyna* and spindle *Euonymus europaeus*.

The combination of intensively managed agricultural land and woodland at Shakenhurst Estate would not normally represent optimal habitat for bees and wasps and active entomologists could be forgiven for dedicating valuable time and effort to 'hotspots' elsewhere in the hope of recording a wide range of species with the chance of rarities. However, the 2020 coronavirus pandemic and the national 'lockdown' with travel restrictions starting in March 2020 enforced entomologists such as myself to concentrate any recording activities to our immediate surroundings. I decided to dedicate all of my recording efforts to the Shakenhurst Estate where we live spending most days recording within walking distance of the front door from the end of March to the end of June 2020 (when I returned to work full-time). The following accounts describe the more interesting species of bees and wasps I recorded, including several of local and national significance that came as a great surprise. I wonder how many other naturalists have experienced similar outcomes discovering previously unknown species from sites that would not normally be investigated in any great detail were it not for the 2020 coronavirus pandemic.

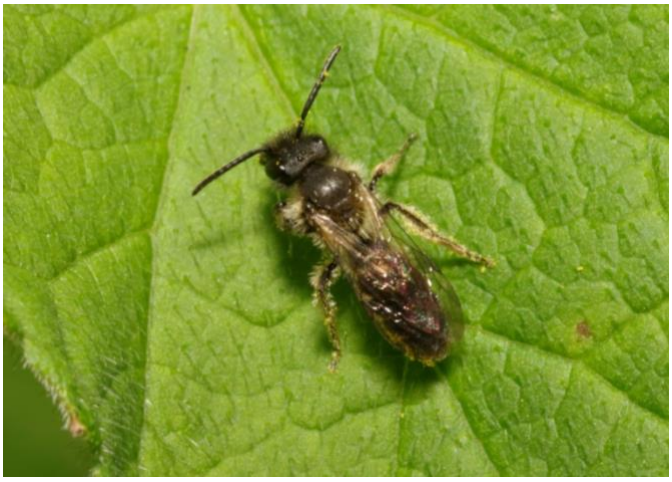
I have now recorded 126 species of bees and wasps at the Shakenhurst Estate since 2015, the full list is provided in Table 1. The following are accounts of selected species of note.

Andrena bucephala (Hym: Andrenidae). Notable A.
Only one Shakenhurst record to date of a female on low vegetation alongside the disused railway on 23.04.2017.



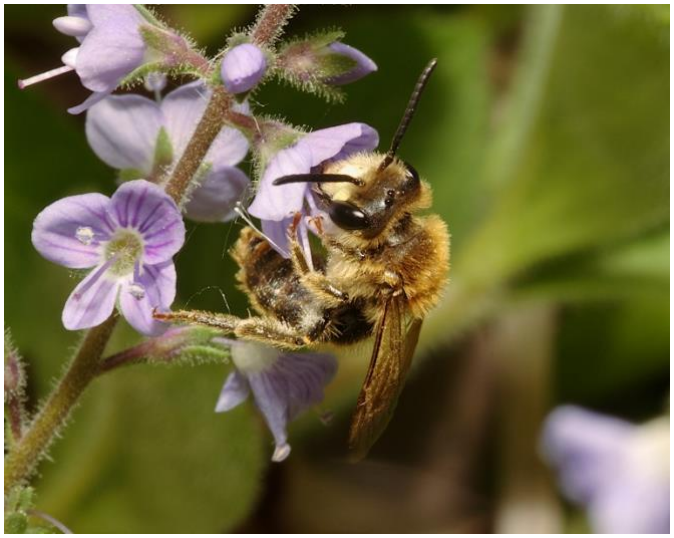
01. *Andrena bucephala* (female) at Shakenhurst on 23.04.2017. K.McGee.

Andrena congruens (Hym: Andrenidae). Notable A.
One record to date of a male collected from greater burdock *Arctium lappa* foliage in our garden on 16.06.2019.



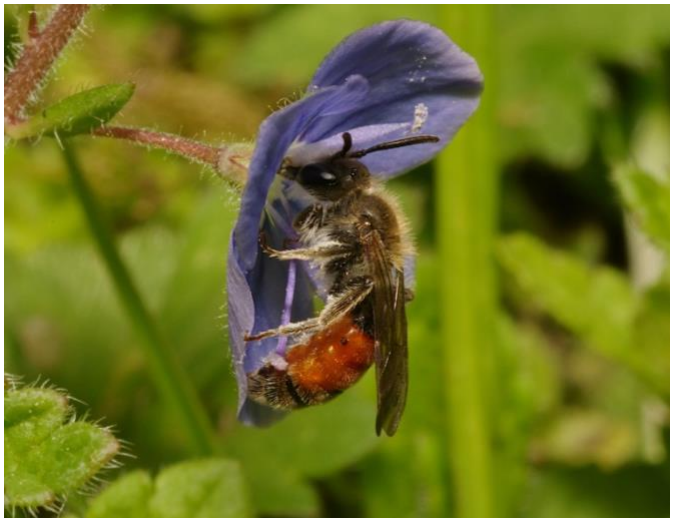
02. *Andrena congruens* (male) at Shakenhurst on 16.06.2019. K.McGee.

Andrena labialis (Hym: Andrenidae).
I was surprised to photograph and capture a male from wood speedwell *Veronica montana* flowers alongside a track in Wissett's Wood on 16.05.2020. Note the extensive pale cream-coloured face patches in the image (03). This localised species is normally more closely associated with legume-rich grasslands and my only previous record is of a female collected from Windmill Hill near Evesham on 29.05.2009. There are semi-improved grasslands on the edge of the wood close to where this male was encountered, but it is also known from woodland rides (Falk & Lewington, 2015). This remains the only male I have recorded, but a rather worn female was collected from the top of a steep bank of bare ground in Wissett's Wood on 14.06.2020.



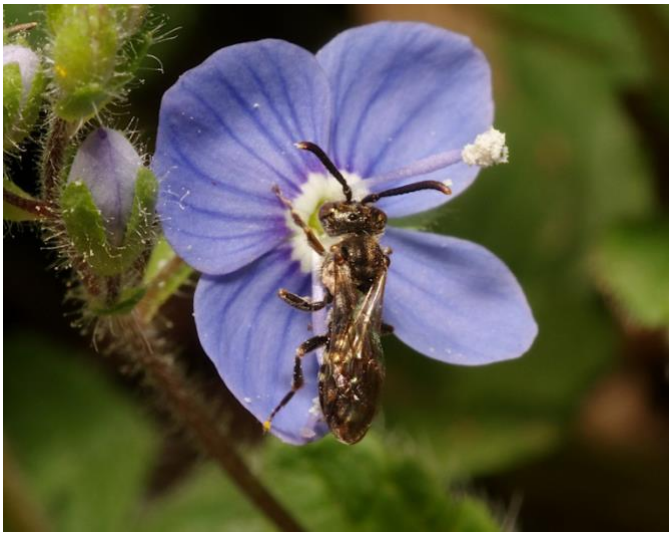
03. *Andrena labialis* (male) at wood speedwell flowers in Wissett's Wood, Shakenhurst on 16.05.2020. K.McGee.

Andrena labiata (Hym: Andrenidae). Notable A.
Found each year during warm sunny conditions in May visiting germander speedwell *Veronica chamaedrys* flowers in small numbers, with never more than six recorded in a single day. Males always outnumber females but they rarely alight at a flower as they are constantly searching for females.



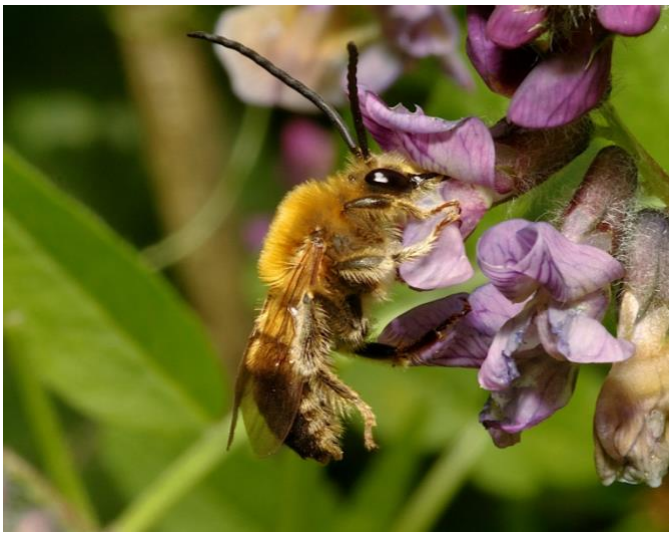
04. *Andrena labiata* (male) at Germander Speedwell flowers at Shakenhurst on 04.05.2020. K.McGee.

Nomada sheppardana (Hym: Apidae). Restricted.
This is another unexpected species to find here. A more complete account has been written for this enigmatic and very small elusive species. I first found a male visiting barren strawberry *Potentilla sterilis* and wild strawberry *Fragaria vesca* flowers at a bank of bare ground alongside a track in Wissett's Wood on 20.04.2020, and a male and female were encountered the following day (19). A peak count of four (two males, two females) were seen at the bank on 04.05.2020, and the final sighting was on 14.05.2020. Other flowers visited were germander speedwell (04) and wood speedwell.



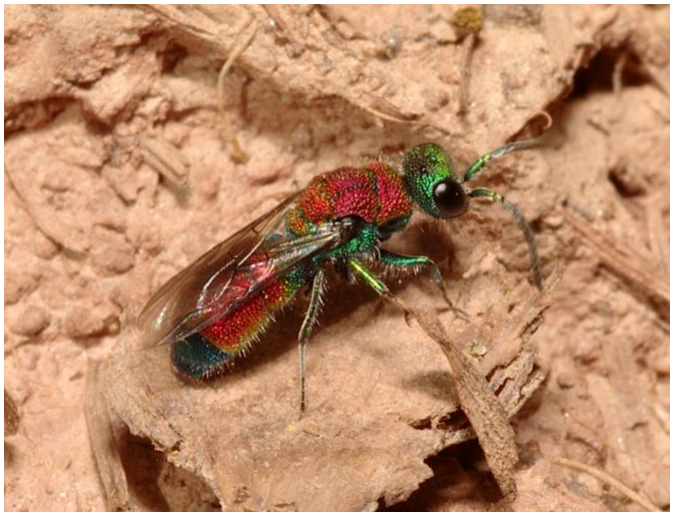
05. *Nomada sheppardana* (male) on germander speedwell flowers at Wissett's Wood, Shakenhurst on 04.05.2020. K.McGee.

Eucera longicornis (Hym: Apidae). Notable A.
My first record was of a worn male along the disused railway on 09.06.2015, and two were recorded at the railway on two dates in May 2016. None were seen at all during 2017 & 2018, but two females were observed visiting bush vetch *Vicia sepium* flowers in our garden on 16.06.2019 and 30.06.2019 which heralded the start of a mini population explosion in this corner of Worcestershire. On 14.05.2020 two males were observed for the first time in Wissett's Wood visiting bush vetch and common vetch *Vicia sativa* flowers, with a peak of four (two males, two females) on 27.05.2020. Two males were seen visiting wood forget-me-not *Myosotis sylvatica* flowers at the disused railway on 18.05.2020. The last one recorded was a female in Wissett's Wood on 05.06.2020.



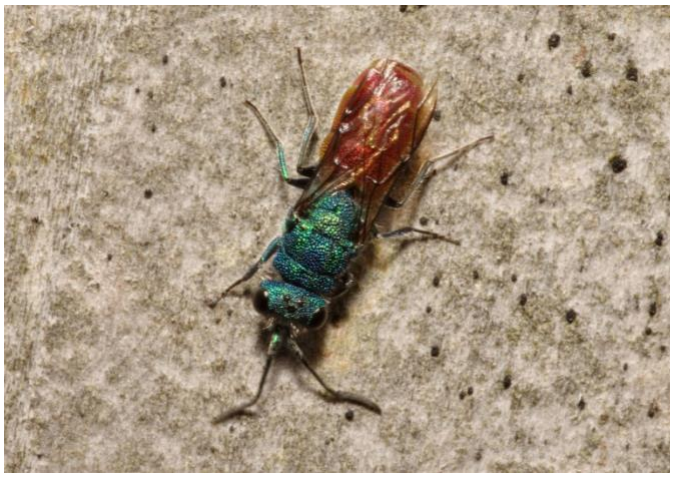
06. *Eucera longicornis* (male) at Bush Vetch flowers in Wissett's Wood, Shakenhurst on 14.05.2020. K.McGee.

Chrysis viridula (Hym: Chrysididae). Scarce.
I first recorded one briefly at a log-pile on the edge of Wissett's Wood on 01.07.2018. *Chrysis viridula* is a parasitoid of the larvae of the mason wasps *Odynerus spinipes* and *O. melanocephalus* (Baldock, 2010). A small colony of *O. spinipes* was found at a steep bank of bare ground alongside a track in Wissett's Wood on 07.05.2020 and two specimens of *C. viridula* were observed inspecting the distinctive 'chimney' nest entrances of *O. spinipes* during the same day. There was a peak of five *C. viridula* at the site on 25.05.2020 and the last record was on 05.07.2020.



07. *Chrysis viridula* at Wissett's Wood, Shakenhurst on 12.05.2020. K.McGee.

Chrysura radians (Hym: Chrysididae). Notable A.
One Shakenhurst record to date of a female collected from our garden wall on 08.07.2019. The image of a female illustrated below was taken near St Peter's church in Martley on 03.07.2019.



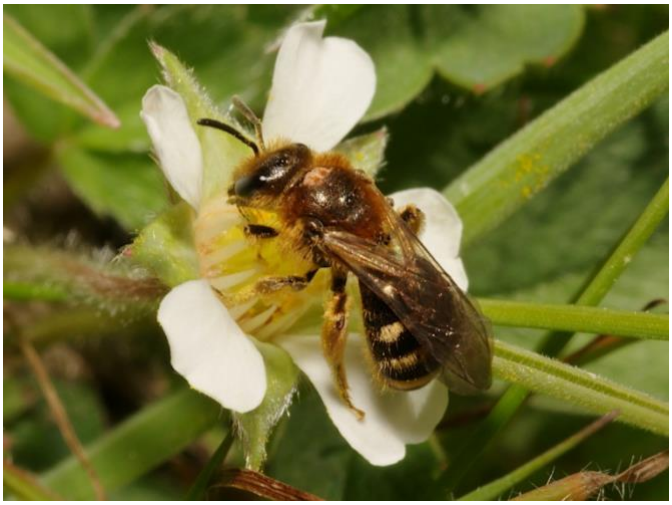
08. *Chrysura radians* (female) at Martley on 03.07.2019. K.McGee.

Pseudospinolia neglecta (Hym: Chrysididae). Rare.
Along with *Chrysis viridula*, this small jewel wasp is also thought to be a parasitoid of *Odynerus spinipes*, but this remains unproven (Baldock, 2010). On 08.05.2020 a jewel wasp was collected from near a nest entrance of *O. spinipes* at the track-side colony that looked exactly like a small example of the ubiquitous *C. ignita* complex with a blue/green thorax and ruby abdomen. Three others of the same small size and appearance were also actively entering and generally showing a lot of interest in the *O. spinipes* chimneys. Identification to species level using Morgan (1984) was straightforward, although it has undergone a name change since then; being known as *Spinolia neglecta* at that time (Morgan, 1984). This is my first record of this species and it may also be new for Worcestershire. One (highly likely) to be this species was seen at the same site on 14.05.2020, and another two were seen entering chimneys on 16.05.2020. Unfortunately, this shy agile species, so typical of jewel wasps generally, proved to be impossible to photograph successfully in the wild, especially on such a precarious steep slope.

Odynerus spinipes (Hym: Vespidae).
A small colony of this widespread but localised potter wasp was first discovered towards the top of a steep bank of bare ground along a track in Wisett's Wood on 07.05.2020 when two females were observed constructing their distinctive 'chimney' nest entrances. The colony never grew to more than approximately ten active nests, but two further small colonies were located elsewhere on the Shakenhurst Estate, one on an up-turned root-plate of a dead ash, and one occupying a low bank of exposed earth in a steeply sloping field prone to land-slips. Females of *O. spinipes* search for the larvae of beetles in the genus *Hypera* (Baldock, 2010) which they stock their nests with (09).

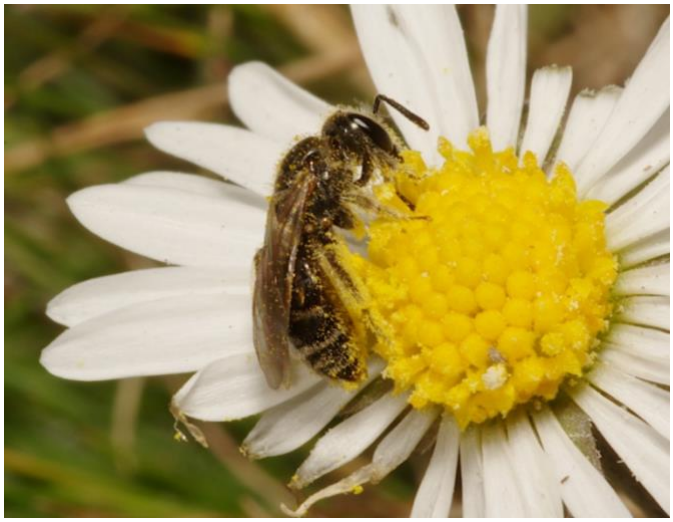
09. *Odynerus spinipes* female with prey at Wissett's Wood, Shakenhurst on 08.05.2020. K.McGee.

Lasioglossum laevigatum (Hym: Halictidae). Restricted.
One female was collected from Daisy flowers on a steep field occasionally grazed by cattle (but un-grazed at the time of capture). The field overlooking the River Rea has thin somewhat calcareous well-drained soils and is just opposite the county boundary in Shropshire (20). The population here was found to be small with just two more seen; a female at mouse-ear-Hawkeed *Pilosella officinarum* on 07.04.2020, and a female at barren strawberry flowers on 15.04.2020 (10).



10. *Lasioglossum laevigatum* (female) on barren strawberry flowers at Shakenhurst on 15.04.2020. K.McGee.

Lasioglossum pauxillum (Hym: Halictidae). Notable A.
A female was collected from mouse-ear-hawkweed flowers at the same steep field described for *L. laevigatum* (above). This species was until recently considered to be a rarity of southern England but has since undergone an expansion in its range towards the north and west (Falk & Lewington, 2015). *Lasioglossum* species can be difficult to identify and one of the features requiring microscopic examination for some female species is a row of projections along the surface of the inner hind tibia spur. These are normally short pointed spines but in females of *L. pauxillum* they are distinctly fat and rounded; hence the vernacular of Lobe-spurred Furrow Bee. Another female was collected from daisy *Bellis perennis* flowers on 15.04.2020 (11).

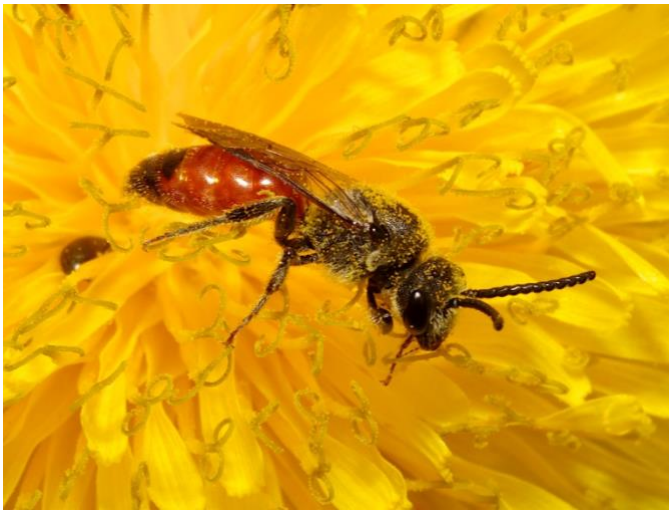


11. *Lasioglossum pauxillum* (female) on daisy flowers at Shakenhurst on 15.04.2020. K.McGee.

Sphecodes niger (Hym: Halictidae). RedList GB Pre94-Rare.
Two records of females collected from a bank of bare ground alongside a track in Wissett's Wood, one on 19.05.2020 and another on 05.07.2020. Bees in the genus *Sphecodes* are parasitoids of other bee species, it is considered that the main host of *S. niger* (a very small species) is *Lasioglossum morio* (also very small), but this remains unproven (Falk & Lewington, 2015, Baldock, 2008). By far the most frequent *Lasioglossum* collected from the steep bank was *L. morio*, however, also collected were *L. lativentre, L. minutissimum, L. nitidisculum, L. rufitarse,* and *L. smeathmanellum.*

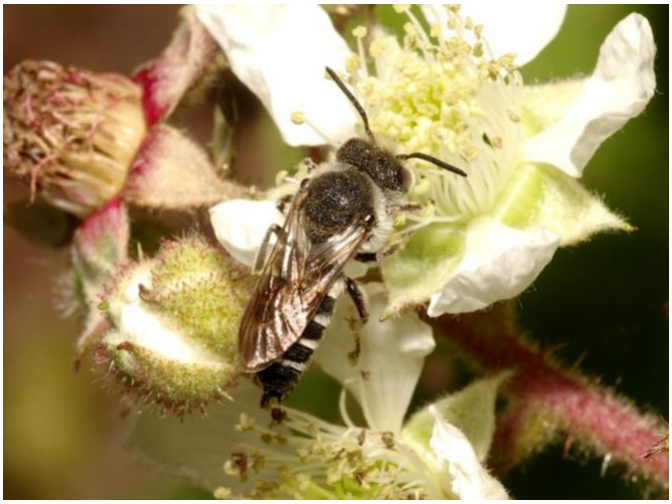
12. *Sphecodes niger* (female) at Martley on 13.07.2017. K.McGee.

Sphecodes rubicundus (Hym: Halictidae). Notable A.
The host of *S. rubicundus* is *Andrena labialis* which is a localised species normally associated with legume-rich grassland (Baldock, 2008). However, two were recorded along a woodland track on the Shakenhurst Estate and are described above (03). One female was collected from the top of a bank of bare ground alongside a track in Wissett's Wood on 25.05.2020, and on 12.06.2020 a male was photographed and collected from dandelion *Taraxacum* agg. flowers nearby (13). My only previous record of this rare species is of a female collected from more typical habitat at Windmill Hill near Evesham on 29.05.2009 when a female of the host *A. labialis* was also collected. *S. rubicundus* is also known from open areas in woodlands (Falk & Lewington, 2015), and has been recorded from Weald Clay woods in Surrey (Baldock, 2008).



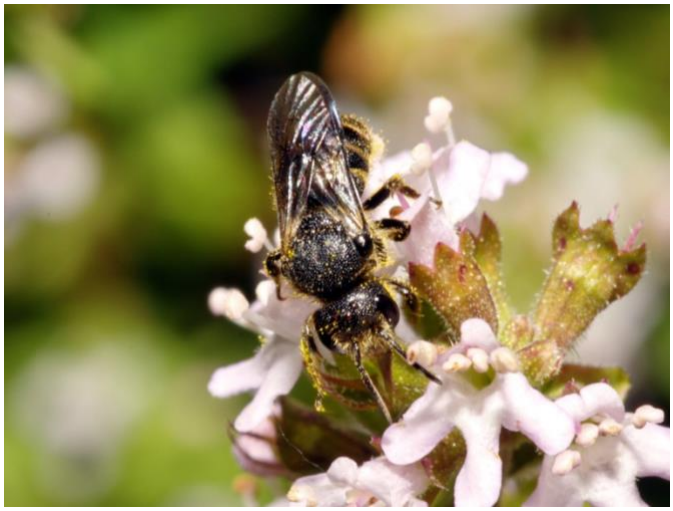
13. *Sphecodes rubicundus* (male) on Dandelion flowers at Wissett's Wood, Shakenhurst on 12.06.2020. K.McGee.

Coelioxys inermis (Hym: Megachildae).
A male collected from bramble *Rubus* agg. flowers in Wissett's Wood on 13.06.2020 (14) constitutes the only Shakenhurst record to date. I only have four other records of this species and all are from St Peter's churchyard in Martley. *C. inermis* is a parasitoid of *Megachile centuncularis, M. versicolor* and possibly *M. ligniseca* (Falk & Lewington, 2015, Baldock, 2008). *M. centuncularis* and *M. versicolor* were both recorded from Wissett's Wood during 2020, but *M. centuncularis* was established as breeding in a fallen oak branch and visiting bramble flowers at the same site during the following day on 14.06.2020.



14. *Coelioxys inermis* (male) on bramble flowers at Wissett's Wood, Shakenhurst on 13.06.2020. K.McGee.

Stelis punctulatissima (Hym: Megachildae). Notable B.
A male photographed and collected from thyme *Thymus* flowers in our garden on 09.06.2018 was reported in an earlier edition of the *Worcestershire Record* and is repeated here (15). It has not been recorded since and remains the only *Stelis* species I've seen. *S. punctulatissima* is a parasitoid of *Anthidium manicatum* which is also (rarely) recorded from our garden.

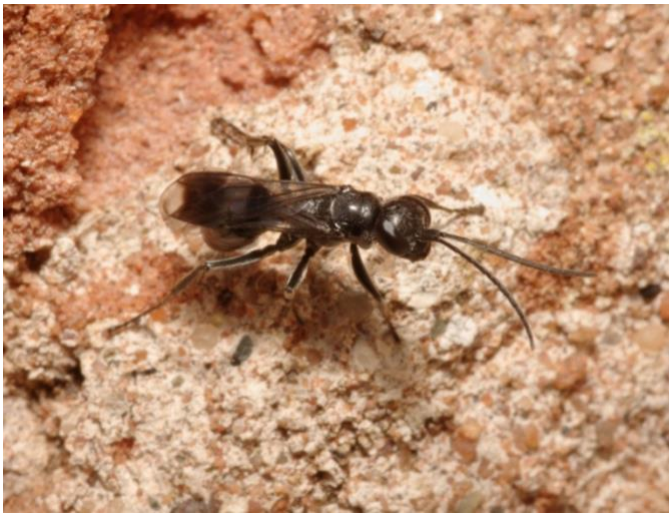


15. *Stelis punctulatissima* (male) on thyme in our garden at Shakenhurst on 09.06.2018. K.McGee.

Agenioideus cinctellus (Hym: Pompilidae).
A female was collected from our garden wall on 03.06.2018 and a male was collected on 16.06.2019. This is a small species of spider-hunting wasp and the female is quite distinctive once familiarised with her bright orange/red legs and a white spot above each eye. The prey items are jumping spiders in the family Salticidae (Baldock, 2010). Two species have been recorded on our wall, *Salticus scenicus* and *Sitticus pubescens. A. cinctellus* is also frequent on the walls of St Peter's Church in Martley where I have encountered females capturing sub-adult *Sitticus pubescens* (16).

16. *Agenioideus cinctellus (*female with prey) at Martley on 01.07.2019. K.McGee.

Dipogon variegatus (Hym: Pompilidae).
One female was collected from a bank of bare ground at a trackside in Wissett's Wood on 22.06.2020 and this remains the only Shakenhurst record to date. I rarely encounter this species in Worcestershire and have just two records of females from St Peters Churchyard in Martley. *D. variegatus* is very similar to *D. subintermedius*, but that species is closely associated with mature woodland trees where females can be found searching for their exclusive spider prey *Segestria senoculata* in the bark crevices of large tree trunks (Baldock, 2010). However, *D. variegatus* is more frequently found in open areas where females hunt exclusively for their spider prey *Xysticus cristatus*, a crab spider in the family Thomisidae (Baldock, 2010).



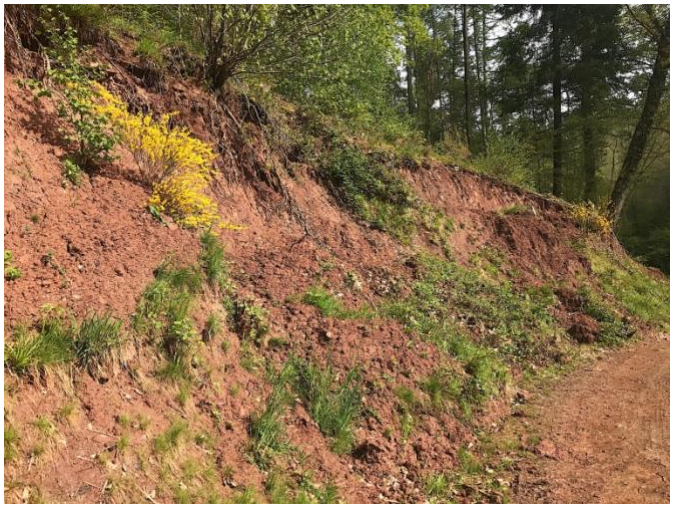
17. *Dipogon variegatus (*female) at Martley on 12.08.2019. K.McGee.

Priocnemis fennica (Hym: Pompilidae).
I have recorded only six species of Pompilidae at the Shakenhurst Estate and even these have been in low numbers and infrequent. Perhaps the most interesting record is of a female *P. fennica* collected from a bank of bare ground in Wissett's Wood on 13.06.2020 because I have very few records of this species generally. It is considered particularly common in Surrey woodlands but little is known of its biology (Baldock, 2010). However, it is known from a wide variety of habitats in Poland where it hunts small spiders in the families Clubionidae and Lycosidae (Wiśniowski, 2009).

Crossocerus binotatus (Hym: Crabronidae). Notable B.
A female collected on 31.05.2020 from the disused railway line near the River Rea is only my second record of this nationally scarce digger wasp that nests in dead timber, my first record is of a female collected from Tiddesley Wood, near Pershore, in July 2002. This is large for a *Croccocerus* species and is capable of capturing snipeflies in the family Rhagionidae to provision its nest cells (Baldock, 2010).

Ectemnius rubicola (Hym: Crabronidae). Restricted.
I have only four records of this scarce digger wasp that resembles a small specimen of the very common *Ectemnius continuus*. Unlike larger *Ectemnius* species that nest in dead timber *E. rubicola* nests in hollow stems of thistles *Cirsium* and brambles (Baldock, 2010). Two females were collected at the Shakenhurst Estate in 2020; one on 31.05.2020 and one from lime *Tilia* foliage on 08.06.2020 (18).

18. *Ectemnius rubicola (*female) at Shakenhurst on 08.06.2020. K.McGee.



19. A bank of bare ground alongside a vehicle access track in Wissett's Wood, Shakenhurst on 30.04.2020. K.McGee.
Thirty-four species of bees and wasps were confirmed as breeding here during 2020. Notable species include *Andrena labialis, Nomada sheppardana, Chrysis viridula, Pseudospinolia neglecta, Sphecodes niger, Sphecodes rubicundus, Coelioxys inermis, Megachile centuncularis* and *Priocnemis fennica*
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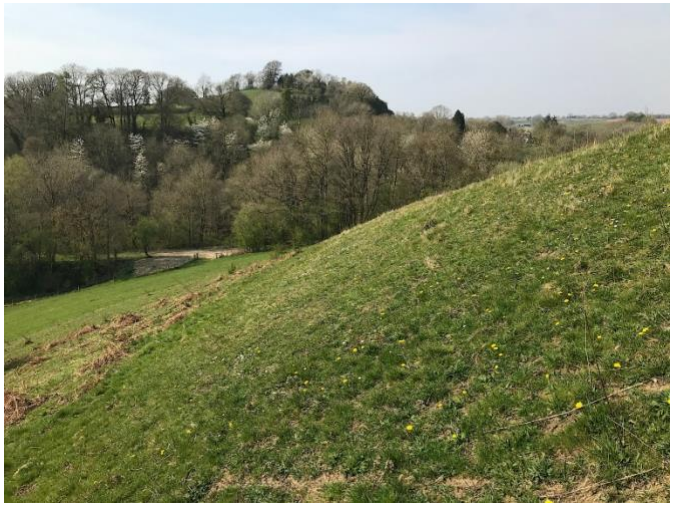

20. A steep and slightly calcareous grassland near the disused railway at Shakenhurst on 17.04.2020. This area is just inside Shropshire. K.McGee.
Notable species confirmed as breeding here during 2020 include *Nomada fucata, Lasioglossum laevigatum* and *Lasioglossum pauxillum.*

Table 1. Species of bees and wasps recorded at the Shakenhurst Estate to date (November 2020, *n* = 126). Notable species are highlighted.

Family	Species
Andrenidae	*Andrena bicolor*
Andrenidae	*Andrena bucephala*
Andrenidae	*Andrena chrysosceles*
Andrenidae	*Andrena cineraria*
Andrenidae	*Andrena clarkella*
Andrenidae	*Andrena congruens*
Andrenidae	*Andrena dorsata*
Andrenidae	*Andrena flavipes*
Andrenidae	*Andrena fulva*
Andrenidae	*Andrena haemorrhoa*
Andrenidae	*Andrena helvola*
Andrenidae	*Andrena labialis*
Andrenidae	*Andrena labiata*
Andrenidae	*Andrena minutula*
Andrenidae	*Andrena nigroaenea*
Andrenidae	*Andrena nitida*
Andrenidae	*Andrena scotica*
Andrenidae	*Andrena subopaca*
Andrenidae	*Andrena wilkella*
Anthophoridae	*Anthophora furcata*
Anthophoridae	*Anthophora plumipes*
Anthophoridae	*Melecta albifrons*
Anthophoridae	*Nomada fabriciana*
Anthophoridae	*Nomada flava*
Anthophoridae	*Nomada flavoguttata*
Anthophoridae	*Nomada fucata*
Anthophoridae	*Nomada goodeniana*
Anthophoridae	*Nomada lathburiana*
Anthophoridae	*Nomada leucophthalma*
Anthophoridae	*Nomada marshamella*
Anthophoridae	*Nomada panzeri*
Anthophoridae	*Nomada ruficornis*
Anthophoridae	*Nomada sheppardana*
Anthophoridae	*Nomada striata*
Apidae	*Apis mellifera*
Apidae	*Bombus barbutellus*
Apidae	*Bombus campestris*
Apidae	*Bombus hortorum*
Apidae	*Bombus hypnorum*
Apidae	*Bombus lapidarius*
Apidae	*Bombus lucorum* agg.
Apidae	*Bombus pascuorum*
Apidae	*Bombus pratorum*
Apidae	*Bombus rupestris*
Apidae	*Bombus sylvestris*
Apidae	*Bombus terrestris*
Apidae	*Bombus vestalis*
Apidae	*Eucera longicornis*
Chrysididae	*Chrysis angustula*
Chrysididae	*Chrysis ignita*
Chrysididae	*Chrysis viridula*
Chrysididae	*Chrysura radians*
Chrysididae	*Pseudomalus auratus*
Chrysididae	*Pseudospinolia neglecta*
Chrysididae	*Trichrysis cyanea*
Colletidae	*Colletes daviesanus*
Colletidae	*Hylaeus communis*
Colletidae	*Hylaeus confusus*
Colletidae	*Hylaeus hyalinatus*

Eumeninae	*Ancistrocerus nigricornis*
Eumeninae	*Ancistrocerus parietinus*
Eumeninae	*Odynerus spinipes*
Eumeninae	*Symmorphus bifasciatus*
Eumeninae	*Symmorphus gracilis*
Halictidae	*Halictus rubicundus*
Halictidae	*Halictus tumulorum*
Halictidae	*Lasioglossum albipes*
Halictidae	*Lasioglossum calceatum*
Halictidae	*Lasioglossum cupromicrans*
Halictidae	*Lasioglossum laevigatum*
Halictidae	*Lasioglossum lativentre*
Halictidae	*Lasioglossum leucozonium*
Halictidae	*Lasioglossum minutissimum*
Halictidae	*Lasioglossum morio*
Halictidae	*Lasioglossum nitidiusculum*
Halictidae	*Lasioglossum pauxillum*
Halictidae	*Lasioglossum rufitarse*
Halictidae	*Lasioglossum smeathmanellum*
Halictidae	*Lasioglossum villosulum*
Halictidae	*Sphecodes ephippius*
Halictidae	*Sphecodes geoffrellus*
Halictidae	*Sphecodes monilicornis*
Halictidae	*Specodes niger*
Halictidae	*Sphecodes rubicundus*
Megachilidae	*Anthidium manicatum*
Megachilidae	*Chelostoma florisomne*
Megachilidae	*Coelioxys inermis*
Megachilidae	*Coelioxys rufescens*
Megachilidae	*Megachile centuncularis*
Megachilidae	*Megachile ligniseca*
Megachilidae	*Megachile versicolor*
Megachilidae	*Megachile willughbiella*
Megachilidae	*Osmia bicornis*
Megachilidae	*Osmia caerulescens*
Megachilidae	*Osmia leaiana*
Megachilidae	*Stelis punctulatissima*
Pompilidae	*Agenioideus cinctellus*
Pompilidae	*Anoplius nigerrimus*
Pompilidae	*Dipogon subintermedius*
Pompilidae	*Dipogon variegatus*
Pompilidae	*Priocnemis exaltata*
Pompilidae	*Priocnemis fennica*
Sapygidae	*Sapyga quincuepunctata*
Sphecidae	*Argogorytes mystaceus*
Sphecidae	*Crossocerus annulipes*
Sphecidae	*Crossocerus binotatus*
Sphecidae	*Crossocerus cetratus*
Sphecidae	*Crossocerus elongatulus*
Sphecidae	*Crossocerus megacephalus*
Sphecidae	*Crossocerus podagricus*
Sphecidae	*Crossocerus styrius*
Sphecidae	*Crossocerus varius*
Sphecidae	*Ectemnius cephalotes*
Sphecidae	*Ectemnius continuus*
Sphecidae	*Ectemnius lapidarius*
Sphecidae	*Ectemnius lituratus*
Sphecidae	*Ectemnius rubicola*
Sphecidae	*Passaloecus gracilis*
Sphecidae	*Pemphredon inornata*
Sphecidae	*Pemphredon lugubris*
Sphecidae	*Trypoxylon attenuatum*
Vespidae	*Dolichovespula media*
Vespidae	*Dolichovespula norwegica*
Vespidae	*Vespa crabro*
Vespidae	*Vespula germanica*
Vespidae	*Vespula vulgaris*

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Images

01. *Andrena bucephala* (female) at Shakenhurst on 23.04.2017. K.McGee.
02. *Andrena congruens* (male) at Shakenhurst on 16.06.2019. K.McGee.
03. *Andrena labialis* (male) at Wissett's Wood, Shakenhurst on 16.05.2020. K.McGee.
04. *Andrena labiata* (male) at Shakenhurst on 04.05.2020. K.McGee.
05. *Nomada sheppardana* (male) at Wissett's Wood, Shakenhurst on 04.05.2020. K.McGee.
06. *Eucera longicornis* (male) at Wissett's Wood, Shakenhurst on 14.05.2020. K.McGee.
07. *Chrysis viridula* at Wissett's Wood, Shakenhurst on 12.05.2020. K.McGee.
08. *Chrysura radians* (female) at Martley on 03.07.2019. K.McGee.
09. *Odynerus spinipes* (female with prey) at Wissett's Wood, Shakenhurst on 08.05.2020. K.McGee.
10. *Lasioglossum laevigatum* (female) at Shakenhurst on 15.04.2020. K.McGee.
11. *Lasioglossum pauxillum* (female) at Shakenhurst on 15.04.2020. K.McGee.
12. *Sphecodes niger* (female) at Martley on 13.07.2017. © K.McGee.
13. *Sphecodes rubicundus* (male) at Wissett's Wood, Shakenhurst on 12.06.2020. K.McGee.
14. *Coelioxys inermis* (male) at Wissett's Wood, Shakenhurst on 13.06.2020. K.McGee.

15. *Stelis punctulatissima* (male) at Shakenhurst on 09.06.2018. K.McGee.
16. *Agenioideus cinctellus (*female with prey) at Martley on 01.07.2019. K.McGee.
17. *Dipogon variegatus (*female) at Martley on 12.08.2019. K.McGee.
18. *Ectemnius rubicola (*female) at Shakenhurst on 08.06.2020. K.McGee.
19. A bank of bare ground alongside a vehicle access track in Wissett's Wood, Shakenhurst on 30.04.2020. K.McGee.
20. A steep and slightly calcareous grassland near the disused railway at Shakenhurst on 17.04.2020. This area is just inside Shropshire. K.McGee.